

1       We claim:

1       1.     An information storage assembly, comprising:

2       a frame;

3       a memory device disposed on said frame;

4       a power supply removeably attached to said frame;

5       a data storage device removeably attached to said frame;

6       first information written to said memory device.

1       2.     The information storage assembly of claim 1, wherein said first  
2 information comprises an identifier assigned to said data storage device.

1       3.     The information storage assembly of claim 1, further comprising:

2       a first memory portion disposed in said memory device;

3       first data storage device configuration information written to said first memory  
4 portion.

1       4.     The information storage assembly of claim 3, further comprising:

2       a second memory portion disposed in said memory device; and

3       second data storage device configuration information written to said second  
4 memory portion.

1       5.     The information storage assembly of claim 4, further comprising:

2       a third memory portion disposed in said memory device; and

3       third data storage device configuration information written to said third memory  
4 portion.

1           6.     A data storage and retrieval system, comprising an information storage  
2 assembly, comprising:  
3           a frame;  
4           a memory device disposed on said frame;  
5           a power supply removeably attached to said frame;  
6           a data storage device removeably attached to said frame;  
7           first information written to said memory device.

1           7.     The data storage and retrieval system information storage assembly of  
2 claim 6, wherein said first information comprises an identifier assigned to said data  
3 storage device.

1           8.     The data storage and retrieval system of claim 6, wherein said information  
2 storage assembly further comprises:  
3           a first memory portion disposed in said memory device;  
4           first data storage device configuration information written to said first memory  
5 portion.

1           9.     The data storage and retrieval system of claim 8, wherein said information  
2 storage assembly further comprises:  
3           a second memory portion disposed in said memory device; and  
4           second data storage device configuration information written to said second  
5 memory portion.

1           10.    The data storage and retrieval system of claim 9, wherein said information  
2 storage assembly further comprises:

3           a third memory portion disposed in said memory device; and  
4           third data storage device configuration information written to said third memory  
5   portion.

1           11.     A method to transfer information between data storage devices,  
2   comprising the steps of:  
3           providing an information storage assembly comprising a frame, a memory device  
4   disposed on said frame, information written to said memory device, a power supply  
5   removeably attached to said frame, and a first data storage device comprising a first  
6   identity removeably attached to said frame;  
7           writing first configuration information from said first data storage device to said  
8   memory device;  
9           detecting an error in said first data storage device;  
10          removing said first data storage device from said frame;  
11          providing a replacement data storage device;  
12          removeably attaching said replacement data storage device to said frame;  
13          determining if said replacement data storage device utilizes said first  
14   configuration information;  
15          operative if said replacement data storage device uses said first configuration  
16   information, providing said first configuration information to said replacement data  
17   storage device from said memory device.

1           12.     The method of claim 11, wherein said first configuration information  
2   comprises an identifier.

- 1           13.     The method of claim 11, further comprising the steps of:  
2                 determining a physical address for said replacement data storage device;  
3                 writing said physical address to said memory device..
- 1           14.     The method of claim 11, further comprising the steps of:  
2                 writing second configuration information to said memory device;  
3                 determining if said replacement data storage device uses said second  
4         configuration information;  
5                 operative if said replacement data storage device uses said second configuration  
6         information, providing said second configuration information to said replacement data  
7         storage device.
- 1           15.     The method of claim 14, further comprising the steps of:  
2                 writing third configuration information to said memory device;  
3                 determining if said replacement data storage device uses said third configuration  
4         information;  
5                 operative if said replacement data storage device uses said third configuration  
6         information, providing said third configuration information to said replacement data  
7         storage device.
- 1           16.     The method of claim 15, further comprising the step of:  
2                 operative if said replacement data storage devices does not utilize said first  
3         configuration information or said second configuration information or said third  
4         configuration information, writing configuration information from said replacement data  
5         storage device to said memory disposed in Applicants' information storage assembly.

1           17.     The method of claim 16, further comprising the steps of:  
2           determining if an identifier is to be assigned to said replacement data storage  
3 device;  
4           operative if an identifier is to be assigned to said replacement data storage device:  
5           providing an identifier; and  
6           assigning said identifier to said replacement data storage device.

1           18.     An article of manufacture comprising a computer useable medium having  
2 computer readable program code disposed therein to transfer information from a first data  
3 storage device to a replacement data storage device, wherein said first data storage device  
4 is removeably disposed in an information storage assembly comprising a frame, a  
5 memory device disposed on said frame, information written to said memory device, a  
6 power supply removeably attached to said frame, the computer readable program code  
7 comprising a series of computer readable program steps to effect:  
8           writing first configuration information from said first data storage device to said  
9 memory device;  
10          determining if said replacement data storage device utilizes said first  
11 configuration information;  
12          operative if said replacement data storage device uses said first configuration  
13 information, providing said first configuration information to said replacement data  
14 storage device from said memory device after said first data storage device has been  
15 removed and said replacement data storage device removeably attached to said frame.

1           19.     The article of manufacture of claim 18, wherein said first configuration  
2 information includes an identifier.

1           20.     The article of manufacture of claim 18, said computer readable program  
2 code further comprising a series of computer readable program steps to effect:

3                 determining a physical address for said replacement data storage device;  
4                 writing said physical address to said memory device.

1           21.     The article of manufacture of claim 18, said computer readable program  
2 code further comprising a series of computer readable program steps to effect:

3                 writing second configuration information to said memory device;

4                 determining if said replacement data storage device uses said second  
5 configuration information;

6                 operative if said replacement data storage device uses said second configuration  
7 information, providing said second configuration information to said replacement data  
8 storage device.

1           22.     The article of manufacture of claim 21, said computer readable program  
2 code further comprising a series of computer readable program steps to effect:

3                 writing third configuration information to said memory device;

4                 determining if said replacement data storage device uses said third configuration  
5 information;

6                 operative if said replacement data storage device uses said third configuration  
7 information, providing said third configuration information to said replacement data  
8 storage device.

1           23.     The article of manufacture of claim 22, said computer readable program  
2 code further comprising a series of computer readable program steps to effect:

3           operative if said replacement data storage devices does not utilize said first  
4 configuration information or said second configuration information or said third  
5 configuration information, writing configuration information from said replacement data  
6 storage device to said memory disposed in Applicants' information storage assembly.

1           24.     The article of manufacture of claim 18, said computer readable program  
2 code further comprising a series of computer readable program steps to effect:

3           determining if an identifier is to be assigned to said replacement data storage  
4 device;

5           operative if an identifier is to be assigned to said replacement data storage device:  
6 providing an identifier; and

7           assigning said identifier to said replacement data storage device.

1           25.     A computer program product usable with a programmable computer  
2 processor having computer readable program code embodied therein method to transfer  
3 information from a first data storage device to a replacement data storage device, wherein  
4 said first data storage device is removeably disposed in an information storage assembly  
5 comprising a frame, a memory device disposed on said frame, information written to said  
6 memory device, a power supply removeably attached to said frame, comprising:

7           computer readable program code which causes said programmable computer  
8 processor to write first configuration information from said first data storage device to  
9 said memory device;

10 computer readable program code which causes said programmable computer  
11 processor to detect an error in said first data storage device;  
12 computer readable program code which causes said programmable computer  
13 processor to provide said first configuration information to a replacement data storage  
14 device from said memory device after said first data storage device has been removed and  
15 said replacement data storage device removeably attached to said frame.

1 26. The computer program product of claim 25, wherein said first  
2 configuration information includes an identifier.

1 27. The computer program product of claim 25, further comprising:  
2 computer readable program code which causes said programmable computer  
3 processor to determine a physical address for said replacement data storage device;  
4 computer readable program code which causes said programmable computer  
5 processor to write said physical address to said memory device.

1 28. The computer program product of claim 25, wherein second configuration  
2 information is written to said memory device, further comprising:

3 computer readable program code which causes said programmable computer  
4 processor to determine if said replacement data storage device uses said second  
5 configuration information;

6 computer readable program code which, if said replacement data storage device  
7 uses said second configuration information, causes said programmable computer  
8 processor to provide said second configuration information to said replacement data  
9 storage device.



1           29.    The computer program product of claim 28, wherein third configuration  
2 information is written to said memory device, further comprising:

3           computer readable program code which causes said programmable computer  
4 processor to determine if said replacement data storage device uses said third  
5 configuration information;

6           computer readable program code which, if said replacement data storage device  
7 uses said third configuration information, causes said programmable computer processor  
8 to provide said third configuration information to said replacement data storage device.

1           30.    The computer program product of claim 29, further comprising computer  
2 readable program code which, if said replacement data storage devices does not utilize  
3 said first configuration information or said second configuration information or said third  
4 configuration information, causes said programmable computer processor to write  
5 configuration information from said replacement data storage device to said memory  
6 disposed in Applicants' information storage assembly.

1           31.    The computer program product of claim 25, further comprising:

2           computer readable program code which causes said programmable computer  
3 processor to determine if an identifier is to be assigned to said replacement data storage  
4 device;

5           computer readable program code which, if an identifier is to be assigned to said  
6 replacement data storage device, causes said programmable computer processor to assign  
7 an identifier to said replacement data storage device.